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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,621	09/29/2004	Cheng-Min Liao	13640-US-PA	5620
31561	7590	06/05/2006	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN			BENNETT, ZAHRA I	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

18

Office Action Summary	Application No. 10/711,621	Applicant(s) LIAO ET AL.	
	Examiner Zahra Bennett	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 6, 7, 14, and 15 are objected to because of the following informalities:

The term "about" in claims 6, 7, 14, and 15 is a relative term which renders the claim indefinite.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 8-10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimura et al. (US Patent 6,095,656).

With respect to claim 1, Shimura teaches a backlight module, comprising:

a bottom plate (Figure 2: 280); and

a plurality of lamps (270) disposed separately over the bottom plate, wherein the bottom plate has a plurality of first areas with lower reflectivity (285, see Column 8, lines 32-36) underneath the lamps and a plurality of second areas with higher reflectivity (280), wherein each second area with higher reflectivity is between two first areas with lower reflectivity (Figure 2).

Art Unit: 2875

With respect to claim 8, Shimura teaches a liquid crystal display apparatus, comprising:

a backlight module (Figure 2: 201), comprising:

a bottom plate (280); and

a plurality of lamps (270) disposed separately over the bottom plate (280), wherein the bottom plate has a plurality of first areas with lower reflectivity (285) underneath the lamps and a plurality of second areas with higher reflectivity (280), wherein each second area is between two first areas (Figure 2); and

a liquid crystal display panel (110) disposed over the lamps.

With respect to claims 2 and 9, Shimura teaches that the lamps (Figure 2: 270) are arranged in parallel and equidistantly (Figure 2) over the bottom plate (280).

With respect to claims 5 and 13, Shimura teaches that the bottom plate (Figure 2: 280) is disposed with a first film with lower reflectivity (285) and a second film with higher reflectivity (280); the first films (285) are disposed on the second film (280, see Column 8, lines 32-36) to form the first areas (280) with higher reflectivity; and a plurality of areas of the second film (280) not covered by the first films form the second areas with higher reflectivity.

With respect to claim 10, Shimura teaches that the ratio (h/w) of a distance "h" between the liquid crystal display panel and the lamps to the distance "w" between two lamps is below 0.7 (Figure 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 6, 7, 11, 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura as applied to claims 1 and 8 above, and further in view of Hagihara et al. (US Patent 5,504,545).

With respect to claims 3 and 11, Shimura teaches that the first areas comprise a plurality of lower-reflectivity films (Figure 2: 285, left and right sides) disposed on the bottom plate (280), and the second areas comprise a plurality of higher-reflectivity films (280, left and right sides). Shimura does not teach that higher reflectivity films are disposed on the bottom plate. Hagihara teaches that the second areas (Figure 1: 17) comprise a plurality of higher-reflectivity films disposed on the bottom plate (6, see Column 3, lines 2-5). It would have been obvious to one of ordinary skill at the time of the invention to have the higher reflectivity films of Shimura disposed on the bottom plate for the benefit of controlling the illumination of the apparatus, as taught by Hagihara.

With respect to claims 4 and 12, Shimura teaches that the bottom plate (Figure 2: 280) is disposed with a first film with lower reflectivity (285) and a plurality of second films with higher reflectivity (280) and a plurality of areas of the first film (285, left and right sides) not covered by the second films (280) form the first areas with lower reflectivity (Column 8, lines 32-36). Shimura does not teach that the second films are disposed on the first film. Hagihara teaches the second films are disposed on the first films to form the second areas with higher reflectivity. It would have been obvious to one of ordinary skill at the time of the invention to have the second films of Shimura disposed on the first film for the benefit of controlling the illumination of the apparatus, as taught by Hagihara.

With respect to claims 6 and 14, Shimura does not teach that the first areas have a reflectivity of about 75-85%, and the second areas has a reflectivity of about 90-99.9%. Hagihara teaches that the first areas (Figure 2: 6) have a reflectivity of about 75-85% (Column 3, lines 9-10), and the second areas (17) has a reflectivity of about 90-99.9% (Column 3, lines 10-12). It would have been obvious to one of ordinary skill at the time of the invention to have the first areas have a reflectivity of about 75-85%, and the second areas has a reflectivity of about 90-99.9%. One would have been motivated to modify the device of Shimura for the benefit of controlling the illumination of the apparatus, as taught by Hagihara.

With respect to claims 7 and 15, Shimura does not teach that the first areas have a reflectivity of about 80%, and the second areas has a reflectivity of about 96%. Hagihara teaches that the first areas (Figure 2: 6) have a reflectivity of about 80% (Column 3, lines 9-10), and the second areas (17) has a reflectivity of about 96% (Column 3, lines 10-12). It would have been obvious to one of ordinary skill at the time of the invention to have the first areas have a reflectivity of about 80%, and the second areas has a reflectivity of about 96%. One would have been motivated to modify the device of Shimura for the benefit of controlling the illumination of the apparatus, as taught by Hagihara.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zahra Bennett whose telephone number is 571-272-2267. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee Luebke can be reached on 571-272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ZB



RENEE LUEBKE
PRIMARY EXAMINER